

Tit LAB NEWS
Christmas 1982

In the Spirit of the Season No exhortations or divertissements this time--just "Best Wishes for a Merry Christmas and a Happy New Year" from the LAB NEWS staff.

Paz en la tierra, buena voluntad a la humanidad. (Peace on earth, good will toward men.)

## Increase Approved For Retirement Income Plan

Sandia's Board of Directors and the Department of Energy have recently approved a special increase in pensions for retired employees who are covered under the Retirement Income Plan. The increase became effective Oct. 1, 1982, and will be paid to all eligible retirees. To be eligible, a retiree or annuitant must have elected to participate in the pension plan as revised in July 1975 and have been receiving a pension on Sept. 1, 1982.
Although the increase is subject to Internal Revenue Service approval, it is Sandia's intention to pay the increase retroactively to Oct. 1, 1982. If the IRS does not approve the Retirement Income Plan increase, it will have to be discontinued.

It is expected that this increase will be included in pension checks as early as February 1983. Approximately 10 days later, a separate payment will be made that will represent the increase amounts payable for the months of October 1982 through January 1983.

For eligible retirees on pension in April 1981 or earlier, the increase will be 7.5 percent of the pension amount payable on Oct. 1, 1982. For eligible retirees whose pensions were effective after April 1981, the increase will be $1 / 18$ th of 7.5 percent ( 0.417 percent) for each full month of retirement from the effective date of pension through September 1982. The minimum increase will be 0.417 percent (one month) and the maximum will be 7.5 percent ( 18 months). The last special increase granted retirees
(1) LAB NEWS

Published Fortnightly on Fridays
SANDIA NATIONAL LABORATORIES
An Equal Opportunity Employer
ALBUQUERQUE, NEW MEXICO
LIVERMORE, CALIFORNIA
TONOPAH, NEVADA
Editorial Offices in Albuquerque, 87185
Phone 505/844-1053 FTS 844-1053
In Livermore 415/422.2447 FTS 532-2447
BRUCE HAWKINSON, Editor
DON GRAHAM, Assistant Editor
CARL MORA, NORMA TAYLOR, writers
LOUIS ERNE, photographer
GERSE MARTINEZ, assistant
BARRY SCHRADER, Livermore reporter
Member, Internationa
Association of Business Communicators
under the Retirement Income Plan was effective April 1, 1981.

All eligible retirees and annuitants are being notified of this increase by letter.

For those eligible employees who have worked past age 65 , the increase will apply in the same manner to pensions payable at retirement as if they had retired at age 65 instead of continuing to work.

Similarly, for those cases in which an annuitant's pension is currently being paid or the survivor annuity has been elected, the same percentage of increase applicable to a service or disability pension will also apply to an annuitant's pension.

Here's an example of how the special increase will be calculated. An employee with a monthly pension of $\$ 500$ on Oct. 1, 1982, who retired before the end of March 1981, will receive an increase of $\$ 37.50$ ( 7.5 percent $x \$ 500$ ), resulting in a new monthly pension amount of $\$ 537.50$. For anyone who retired after March 1981, the increase will be prorated at the rate of 0.417 percent for each month of retirement through September 1982.

In approving this increase, the Sandia Board of Directors stated that this special increase in Retirement Income Plan pensions was approved in the light of current business and economic conditions and that this action cannot be considered an indicator of future pension changes. Any such decisions regarding Retirement Income Plan pensions will be independent of any past or present actions and will remain at the discretion of the Board of Directors.

## Increase Jan.

for Pension
Security Plan

An increase was provided for as part of the new Pension Security Plan announced in April 1981. DOE and IRS approvals of the Plan were subsequently obtained, permitting this increase to be paid on its effective date of Jan. 1, 1983. Therefore, retired eligible employees and annuitants covered under the Pension Security Plan will receive this special increase beginning with their January 1983 pension checks.
To be eligible, a retiree or annuitant must have elected to participate in the pension plan as revised in July 1975, and have been receiving a pension on Dec. 1, 1982. Eligible retirees or annuitants will receive an increase in their present pension of $1 / 18$ th of 7.5 percent ( 0.417 percent) for each full month of retirement from the effective date of pension through December 1982. The minimum increase will be 0.417 percent (one month) and the maximum will be 7.50 percent ( 18 months). The last special increase granted retirees under the Pension Security Plan was effective in July 1981.

All eligible retirees and annuitants are being notified of this increase by letter.

For those PSP employees entitled to pensions who have worked beyond age 65 , the increase will apply in the same manner to service pensions payable at retirement as if they had retired at age 65 instead of.continuing to work.

Similarly, for those cases in which an annuitant's pension is currently being paid or the survivor annuity has been elected, the same percentage of increase applicable to a service or disability pension will also apply to an annuitant's pension.

Here's an example of how the special increase will be calculated. A retiree with a monthly pension of $\$ 500$ on Jan. 1, 1983, who retired by the end of June 1981 will receive an increase of $\$ 37.50$ ( 7.5 percent of $\$ 500$ ), resulting in a new pension amount of $\$ 537.50$. For anyone who retired after June 1981, the increase will be prorated at the rate of 0.417 percent for each month of retirement through December 1982.

## Vision Care Plan Announced

Beginning Jan. 1, 1983, a company-paid Vision Care Plan will be provided for active employees and their families. This plan will

## Be Healthy and Wise in '83

It is that time of year again - time to start on all those new self-improvements. But in order to enjoy your new changes, you need to be healthy as well as wealthy and wise. So decide to quit smoking in 1983, and take Medical's next Quit Smoking class. The class will meet Jan. 5 through Jan. 31, noon to 1 p.m. on Mondays and Wednesdays for eight sessions in the Conference Room of T13. For further information call Arlene Price at 6-0021.
help pay for vision examinations, necessary corrective lenses, and frames.

Active regular employees with at least six months of net credited service and their eligible dependents will be covered by the Vision Care Plan. Retired employees and their dependents will not be covered, however.

During a 24 -month period, benefits will be available to eligible persons for one vision examination, one pair of frames, and lenses, either eyeglasses or contact lenses. These benefits will be paid according to a fixed schedule and will apply to vision care expenses incurred after Dec. 31, 1982.

A detailed description of the plan, including the fixed payment schedule, will be distributed to active employees.

## From Saturnalia to Season's Greetings

As once more we approach the ecumenically entitled "holiday season" (some of us are already well into it), it is appropriate to recall that we are preserving many ancient traditions.

First and foremost, Christmas Day is the Christian festival of the birth of Jesus Christ. But He was not born on Dec. 25 of the year A.D. 0 or 1 ; in fact, no one knows when Christ was actually born - it may have been in 4 B.C. An early Christian tradition recorded by St. Chrysostom placed the Nativity on Dec. 25, and this might have been the basis on which Pope Julius I established the feast on this date in the 4th century. Prior to this, Christians had celebrated the Nativity and Epiphany together on Jan. 6.

Or Pope Julius I may have chosen Dec. 25 because it was already a sacred pagan festival in the Roman Empire. Called "Dies Natalis Invicti Solis" (Birthday of the Unconquered Sun), the day was the chief festival of the Phrygian god Attis and also of Mithras whose cult was popular in the Roman army. The festival fell between the week-long feast of the Saturnalia, which began on Dec. 17, and the Kalends of January - the new year. It derived from ancient midwinter festivals that the primitive European and Asian Peoples had celebrated in prehistoric times - the sun's "rebirth" at the winter solstice, on or about Dec. 21.

The Roman Saturnalia was a festival dedicated to a golden age of freedom in the far past when Saturn ruled the world. Candles and green wreaths were exchanged as presents, and the streets were crowded with noisy processions of garlanded men and women carrying lighted tapers. All distinctions of rank were temporarily forgotten and customary rules of conduct relaxed; masters and servants changed places with all joining together as equals in a seven-day round of feasting, drinking, games, dances, and masquerades.

A mock king was chosen from among the slaves to preside over the festivities. His word was law as long as his reign lasted. He could deride those in authority and order


It gicaling liy my fieng if soned
Wo thee an Elicistmes) Eloy, min firment.
respected citizens to perform ridiculous antics. Obviously, there were limits to the lengths this slave king could go because, once the Saturnalia was over, it was bad news for the slave that had enraged a senator or centurion.

The Kalends, the Roman new year, began on Jan. 1 and lasted for three days. Houses were decorated with lights and greenery, and presents given to friends, children, and the poor. Even the biggest tightwad was supposed to spend generously if not recklessly. Revelers donned animal skins with the horns or skulls of animals on their heads and ran about the streets.

In the 4 th century, Christians were a small but growing minority in a still largely pagan world. The early church disapproved of pagan practices but had no power to prohibit them. By making Dec. 25 the focal point of Christianity, the church fathers sanctified and renewed what had already been a sacred day to many cultures for thousands of years.

Christianity spread rapidly throughout the Roman Empire and beyond - to Germany, Scandinavia, and Ireland. Mirroring the political and cultural division of the Western and Eastern Roman Empires, there arose a Western church led by the Bishop of Rome, or the Pope, and an Eastern Orthodox Church headed by the Patriarch of Constantinople. These two branches of the Christian Church were adopted by a myriad of peoples and cultures, all of whom brought a host of pagan rites and practices to their new religion.

For instance, mistletoe, which was held sacred by both the Celtic Druids and the Norsemen, was thought to bring good luck and fertility, and to protect the house from witcheraft. Kissing under it seems to have been a solely English custom - in fact, foreigners in Tudor England frequently remarked how often men and women exchanged kisses, even if just introduced.

Christmas trees had existed in Germany from at least the 16th century. One tradition has Martin Luther introducing the custom by using a candlelit tree as an image of the

starry heavens whence Christ came. Christmas trees spread slowly through Protestant Europe except for England. Neither was the practice popular in Catholic Latin countries where the giftexchanging holiday remained the Feast of Epiphany on Jan. 6. Instead of Santa Claus or Father Christmas or St. Nicholas leaving gifts at the foot of a gaily decorated tree, the Three Kings (known as the Three Wise Men) leave gifts in the shoes of children in southern Europe. This is the custom also in Latin America, although American-type Christmas celebrations have gained favor in some countries, especially Mexico and in the Caribbean. What happens is that the kids make out like bandits - what Santa doesn't bring them on Dec. 25, they get a second shot at on Jan. 6.

The dour Puritans, both in England and the Massachusetts Bay Colony, frowned upon heathenish festivities at Christmas. They banned Yule celebrations in 1659, thereby dampening their revival for two centuries. In the other English colonies, German, Swedish, Dutch, and other nonEnglish immigrants continued their Christmas celebrations in private. We all remember the story of George Washington leading his ragged Continental Army on the retreat through New Jersey after being defeated by the British at the Battle of Long Island. Coming upon Trenton on Dec. 25, 1776, the Americans encountered a force of mercenary Hessians that were busily celebrating Christmas and not manning their outposts. An easy victory for our boys.

Alabama was the first state to make Christmas a legal holiday in 1836. By the turn of the century, the rest of the country had followed suit.

The first English Christmas tree was trimmed in 1821 at a children's party in the royal court. By 1841, Queen Victoria had a tree in Windsor Castle, although most of her subjects were not in a hurry to adopt what Charles Dickens called "the new German toy." (Incidentally, Dickens' own A Christmas Carol was no small influence on our contemporary holiday rituals.)

Christmas trees were adopted with much more enthusiam in the United States than they were in the mother country. Christmas greeting cards first appeared in England in the 1840s. By 1870, the custom was well established there, and a few years later it reached the United States.

Another component of the holiday season is Chanukah (or Hanukkah), the Jewish "Festival of Lights," which commemorates the rededication of the defiled Temple of Jerusalem after a revolt in 168 B.C. against the Hellenistic Syrian king Antiochus. On each day of Chanukah, Jews around the world light a candle on the Menorah, a candelabrum with nine arms. This symbolizes the miraculous burning of the sacred flame in the Temple for eight days after the defenders had been reduced to only one day's supply of oil.

Thus continuing a number of ancient traditions, our Christian and Jewish "midwinter festivals" celebrate both the brotherhood and aspirations for freedom of all humankind, two values it would behoove us all to keep in mind in these parlous times. $-\mathrm{cm}$

FELIX PADILLA (ret.) painted the church at Ranchos de Taos for the cover of this Christmas issue of LAB NEWS.


## Cover Painting

## Artist Felix Padilla Keeps Active

The painting on the cover of this Christmas issue of LAB NEWS is the work of Felix Padilla, who retired from the Labs in February 1979. The subject is the St. Francis de Assisi Parish Church at Ranchos de Taos.

The painting is one of two of the church that Felix completed recently - the other hangs in the Museum of New Mexico in Santa Fe in an exhibit opening today. It will be on display through April.

Felix has been an artist all his life. He started painting as a youngster growing up in Albuquerque, and hung an early painting in the Fine Arts Gallery at the New Mexico State Fair in 1940. Except for the years that he spent in the Army in Europe during WWII, Felix has had paintings accepted for the State Fair exhibit every year. During his 30 years at Sandia, Felix drew cartoons regularly for the LAB NEWS

Since his retirement, Felix has devoted
most of his time to his art work, and he has received a number of national and regional awards. The most recent was a first place in the New Mexico Wildlife Federation Exhibi tion for a painting of buffalo on the prairie. The painting is scheduled to be part of a national show in Washington, D.C., in May.

This month, Felix's work is featured as the invited artist at a seven-state regional show sponsored by the Sangre de Cristo Arts Center in Pueblo, Colo.
"Painting keeps me busy and active," Felix says. "It's nice to get recognition for something that I do primarily to please myself. There's something else that keeps me active - my eight grandchildren. There were 19 of us here for Thanksgiving dinner.'

Felix's work is currently handled by Nightsong of Taos Gallery in Old Town and by La Paloma Gallery in Taos

## Events Calendar

Dec. 17-19 -"El Sueño de Navidad del Santero," an adaptation of "Los Pastores" ("El Sueño" includes "Las Posadas"), presented by La Compañía de Teatro de Alburquerque; 8 p.m. KiMo.
Dec. 18 - "Las Posadas," refreshments and piñatas to follow, 6 p.m., Barelas Community Center, 766-7802
Dec. 18 - Children's Holiday Show, Zapatitos Puppets, Auditorium, 1:30 and 3:30 p.m., Albuquerque Museum.
Dec. 19 - Annual Winter Holiday at the Rio Grande Zoo. Living nativity scene, ac tivities, entertainment, 2-4 p.m., Rio Grande Zoo, 766-7823.
Dec. 23, 25-26*, 29-31, Jan. 1-2* - Albuquer que Civic Light Opera, "Carousel," 8:15 p.m., *2:15 p.m. matinee, Popejoy, 277-7830.
Dec. 24-29 - Acoma, Cochiti, Isleta, Jemez, Laguna, Picuris, San Felipe, San Ildefonso, San Juan, Santa Ana, Santa Clara, Santo Domingo, Taos, Tesuque, and Zia Pueblos: 24 day-long dances (Acoma),
all-day Spanish dance/drama, "Los Matachines" (Picuris, San Ildefonso, San Juan, Santa Clara) ; dusk pine-torch processions (San Juan, Taos); turtle dance (San Juan, Taos). Contact pueblos.
Jan. 1 - Cochiti, Laguna, Picuris, San Felipe, Santa Ana, Santa Clara, Santo Domingo, and Taos Pueblos: annual New Year's Day celebration - Comanche, deer, turtle and other dances. Contact pueblos.
Jan. 6 - Cochiti, Picuris, San Felipe, Santa Clara, Santo Domingo, Taos, and Tesu que Pueblos: Annual Three Kings Day celebration. Election, installation of pueblo governors, council members. All afternoon buffalo, eagle, and elk dances. Contact pueblos.
Jan. 7 - Chamber Orchestra of Albuquerque concert, 8:15 p.m., Albuquerque Little Theater
Jan. 7-8 - 5th Annual International Gymnastics Invitational, sponsored by Albuquerque Journal. 7:30 p.m., UNM Arena.

## Take Note

Two papers presented by Ron Iman (7223) and W.J. Conover (Texas Tech) at the American Statistical Association annual meeting have been named as the first and second place most outstanding papers of 1982. Ron and Conover co-authored "Analysis of Covariance Using the Rank Transformation" that won the top award. Ron, Conover, and Stephen Hora (also Texas Tech) were co-authors of the runnerup paper, "A Comparison of Asymptotically Distribution Free Procedures for the Analysis of Complete Blocks." In 1980 Iman and Conover also won the two top awards. They are the only authors to win both first and second place in the same year in the ASA competition.

The Albuquerque Chapter of the American Society for Quality Control is sponsoring an essay contest among high school students on the subject of the trend toward buying foreign products rather than American. Deadline is Feb. 16. Prizes, \$50 savings bonds, will go to the top three essayists. For contest rules, call Gene Jeys (7412) on 6-0327.

The next meeting of the local American Society for Quality Control chapter will be Jan. 11 at the Coronado Club at 6 p.m. The speaker will be Al Candelaria of GTE Lenkurt. The public is invited; contact Gene Jeys on 6-0327 for reservations.

A New Year's Eve dance for singles is being sponsored by a coalition of Albuquerque singles organizations. The dance, with music by Twelve Gauge, will be held in the social hall of the church at 7701 Wyoming NE from 9 to $1: 30$. Cost is $\$ 7$ per person. For tickets or information, call Frank Ostermann at 6-7690.

Sandians retiring this month and not shown in LAB NEWS photos include Opal Noel (2425), Howard Perdue (7133), Lois Easton (3140), John Barnes (7553), and L.C. Trujillo (9321).

Your kids might enjoy a performance by the Zapatitos puppets tomorrow at the Albuquerque Museum. Both performances, 1:30 and $3: 30$, are free. Seating is limited and is not reserved. Each performance by the classical marionettes will last about 50 minutes. For more info, call the museum at 766-7878.

Sandians' spouses who have always wanted to learn Japanese should be thrilled to learn that Beginning Japanese I will be offered as a non-credit class for those who have not studied Japanese previously. The course will be held at the International Center, 1808 Las Lomas NE, each Monday and Wednesday from 3 to 4 . Classes begin Jan. 17. And Beginning Japanese II will be a three-credit course offered next semester by the Department of Modern and Classical Languages at UNM for those who have taken the earlier course or who have the consent of the instructor. This class meets Monday, Wednesday, and Friday from 1 to $1: 50$. Anyone interested in either course may call Barbara Muchisky at UNM on 277-4032.


AL CHERINO (3435) and CURTIS HINES (0330)

## Supervisory Appointments

AL CHERINO to section supervisor (lieutenant), Security Operations Division II 3435, effective Dec. 1.

Al joined the Labs' maintenance department as a painter in 1958. He became a security inspector in 1970. Before coming to Sandia, Al served three years in the Army in Korea, and attended the University of Albuquerque. Al enjoys fishing and hunting, but he spends most of his spare time on his ranching activities in Isleta.

CURTIS HINES to manager of Systems Studies Department 0330, effective Oct. 1.

Curtis joined the Labs in 1967 as an MTS in the systems analysis group. He was promoted to supervisor of Systems Studies Division two years later. Curtis also headed

## Congratulations

Annette Richards (3154) and Tech Sgt. Thomas Black (KAFB) will be married in Albuquerque, Dec. 25.

Alan (3611) and Trish Spencer, a son, Keith Gregory, Nov. 6.

## Sympathy

To Jerry Rejent (1834) on the death of his mother in Buffalo, N.Y., Nov. 30.

[^0]— World Press Review
the Phase I and II Division for five years and, from 1978 until his recent promotion, he was supervisor of Systems Research Division III 0313.

He received his BS and MS in EE from Mississippi State and his PhD, also in EE, from Auburn University. He is a member of IEEE.

Curtis enjoys hiking, hunting, photography, and tennis. He and his wife Judy have two children and live in the NE heights.

MIKE PADILLA to section supervisor (lieutenant) in Security Operations Division II 3435, effective Dec. 1.

Mike came to Sandia in 1975 as a janitor,
and a year later became a security inspector. Mike enjoys lifting weights as well as working around his home in Los Lunas.

CHEWIE BACA to section supervisor (lieutenant), Security Operations Division II 3435, effective Dec.1.

Before becoming a security inspector at the Labs in 1957, Chewie taught cabinet making and construction at the Belen High School. He attended Highlands University.

Chewie was born and reared in the Tomé area, and continues his farming and ranching interests there and on the west side of the Manzano Mountains. He also raises and shows registered quarter horses. Chewie and his wife Erminia have one daughter.


AT TONOPAH TEST RANGE, Diana Root (EG\&G) and Lance Wilson (7173) spread a little holiday cheer by decorating one of the two dozen newly transplanted joshua trees inside the Control Center tech area. Note the bleached skulls at the base of the tree - strictly a local decor.

# No More 'Monthly Paid' Employees Next Year 

Paychecks tend to occupy a special niche in the lives of all of us. The new payroll system, which goes into effect next month, means that employees now paid monthly will be paid biweekly. (Employees now paid weekly will continue to be paid weekly and will note few differences in their checks). Here is some background on the changes.

Sandians involved with the payroll system have known for a long time that the current system needed to be replaced by one that better serves the needs of employees and Sandia. The automated payment portion of the system was written in the early 1960s in FORTRAN for an IBM 7090 computer. The programs were later converted from the 7090 to a UNIVAC 1108. The programs have lived their normal lives two times over and more. Early this year Sandia management decided that the 1108, on which payments are processed, should be released as soon as the programs could be moved to another computer. Management also decided that the time had come for the payroll system to be redesigned, rather than simply converted to another computer.

The new system offers significant dollar savings to Sandia. By purchasing a Payroll Package Program, Sandia is able to save development programming costs. Sandia can implement the system in January and thus release the 1108 computer one year earlier than would be possible if the entire system were programmed at Sandia. The resulting savings in 1108 maintenance, in programming (both development and maintenance), in reruns, and in overtime are over a million dollars.

The new system also offers benefits in terms of more timely cost information. Both biweekly and weekly time card data will be converted to payroll dollars each week, fed into the financial system, and made available for management use.

For employees, there are benefits also. Biweekly-paid employees will, of course, be paid more often than under the current system and will be able to count on the same day as payday every two weeks. The new pay statement will provide all employees with information on vacation availability, a feature that many employees have requested. In addition to the usual information - pay rate, earnings, and deductions the new statement will itemize vacation and sick leave taken during the pay period and year-to-date. The number of exemptions claimed will also be noted.

For biweekly-paid employees, the first payment in the new year will be Jan. 3, the last monthly payment for December 1982 earnings. The first biweekly payday will be Jan. 20 and will cover the 9 days from Jan. 3 to 13.

For weekly-paid employees, the first payment in the new year will be Jan. 6 and will cover the week Dec. 17 to 23. This payment is still under the old system. The first
payday with the new system will be Jan. 13, covering the period Dec. 31 through Jan. 6.

Income taxes and Social Security, if applicable, will come out of each paycheck for all employees. Most other deductions will also be taken each pay period in order to avoid ups and downs in net pay from one period to the next. However, some deductions have to be paid to outside organizaticns by a certain time of the month and must be taken before that time. In other cases, the amount of the deduction is normally quite small and impractical to deduct each payday. In these cases, the deductions will be taken less frequently than each pay period.

Biweekly-paid employees will notice that, because only one payment will be made under the new system in January, Coronado Club and supplemental insurance deductions having to be paid to such outside organizations before the end of the month will be taken on Jan. 20. These will normally be scheduled for the second paydate of the month.

Earnings such as in-hours-training, voting time, holidays, and visits to Medical will be grouped and reported as standard time on the new statement. Special allowances, overtime, premium differentials, or other supplemental earnings will be reported separately on the pay statement. Earnings detail will appear on the statement only for the period when the type of earnings occurs; special earnings not having current pay period activity will be grouped under the caption "Other Pay" and reported in the year-to-date column.

Biweekly-paid employees will not have to wait until the next month to be paid for overtime worked late in a month. All earnings for each biweekly pay period will be paid on Thursday, one week after the end of the pay period. Employees should be able to check their earnings more easily and determine that they are complete and correct.

The new payroll system will utlize Automatic Clearing House (ACH) technology to deposit net pay in the bank designated by the employee. Net pay or deductions going to the Sandia Lab Federal Credit Union will also be processed through the ACH system.

The Albuquerque National Bank will operate a clearing house to serve the local area. Deposits going outside the local area will be processed through the clearing house at the Federal Reserve Bank in Denver. All deposits should be available in the employee's designated bank on payday if the bank is a part of the ACH system.

Empioyees not currently taking advantage of direct deposit are urged to consider this option. When net pay is deposited directly, employees can count on its being available, even if they are sick or away on vacation on payday. The time spent cashing or depositing the check and the possibility of loss or theft are eliminated.

# Supervisory Appointments 



DICK ROHDE to manager of Materials Department 8310, effective Dec. 1 .

Dick began his career at Sandia Albuquerque immediately after college in 1967, first working in the Shock Wave Physics Division. He was promoted to division supervisor in the Metallurgy Department in 1969 and headed the Mechanical Metallurgy Division and later the Physical Metallurgy Division, the post he held until accepting his new post in Livermore.

His education at the University of Utah includes a bachelor's degree in ceramic engineering and a PhD in metallurgy. He is active in the American Institute of Metallurgical Engineers, the American Society for Metals, and the American Society for Testing Materials.

Dick's outside interests include skiing, family camping, and church work. He and his wife Georgia have five children, four of them still at home.

MIM FISH to super-
 visor of the newlycreated Analytical Thermal/Fluid Mechanics Division 8125, effective Dec. 1.

Mim came to Sandia in 1978 after a year as a post-doctoral fellow under the auspices of the Organization of American States at the Instituto de Investigaciones Eléctricas in Cuernavaca, Mexico. Her first assignment was in the area of solar central receiver systems analysis in the Systems Studies Department. In 1981 she moved to the Applied Mechanics Department where she has been working on an analytical modeling and experimental characterization of packed bed chemical reactors for weapons applications.

Her education includes a bachelor's degree in chemistry from Rice, a master of science degree in chemical engineering from Tulane, and a PhD in the same field from Princeton.

Mim's outside interests include gourmet Italian and creole cooking, wine tasting and playing squash. She resides in Pleasanton.


RETIREES Paul Mutschler (left) and Frank McMurtrey (both 8414-1).


PANORAMIC VIEW on Ruth Glacier was appreciated by Marcus Libkind's ski party.


TALL PEAKS along route were a constant source of avalanche danger.

## Glacier Peaks Curiosity

## Sandian Skis Alaska

Most skiers are content with the crowded slopes of Squaw Valley, Kirkwood, or Badger Pass, but not Marcus Libkind (8512). An experienced ski tourer, he seeks challenges in remote areas - such as the glaciers of Mt. McKinley National Park in Alaska which he skied earlier this year.

His eight-day trek on skis began with three friends, Kim Grandfield, Bill and Bob McConachie, along with Marcus, flying to Anchorage and then to Talkeetna by ground transportation. Talkeetna is the jump-off point for skiers and mountain climbers planning to reach the park by bush plane.

With Lowell Thomas Jr. as their pilot, they flew to the Ruth Amphitheatre on May 8 where they began their skiing. While they found the temperature a little cooler than expected at this 5000 -foot elevation $\left(-10^{\circ} \mathrm{F}\right.$ at night), the 30 -degree weather in the daytime, clear skies, and perfect snow conditions were all they had hoped for.

Marcus recalls the delight of skiing on six inches of cold powder on top of a solid base, gliding effortlessly across the Ruth Glacier. He feels that skiing there requires only intermediate ability, but the everpresent danger of crevasses and avalanches requires that those venturing there have an excellent knowledge of mountaineering techniques. Whenever not in camp - which included all the time spent on skis - they were roped together. Before starting the trip, they discussed what equipment and techniques would be required should someone fall into a crevasse. During a trip each member fell into at least one crevasse but with no serious consequences. They also carried radio beacons in case they were covered by an avalanche.

Being a former owner of Sunrise Mountaineering in Livermore and having the present owner on the trip meant they were well

## (27) swon (11) SANDA LIVERMORE NEWS <br> VOL. 34, NO. 25 SANDIA NATIONAL LABORATORIES DECEMBER 17, 1982

equipped for such an adventure, Marcus admits. He feels the trip was reasonably inexpensive, he spent only $\$ 600$ on transportation and about $\$ 100$ on foodstuffs. Of course the big expense is the equipment, about $\$ 2000$ per skier, but much of that they owned before the trip and all of it is usable on future outings.

The first day in the Ruth Amphitheatre was leisurely with most of the time spent telemarking on the slopes above camp and enjoying the vastness of the region. The second day they headed toward the backside of Mt. Dickey to test gear and get into condition for the more strenuous days to follow. It was this day that the summit of Mt. McKinley first appeared from the clouds and loomed above the camp. The third day found them skiing the Great Gorge. This is where the Ruth Glacier descends from the Amphitheatre flanked by 5000 -foot walls which rise to such peaks as Mt. Dickey and Moosetooth. On the fourth day they ascended a 7272 -foot peak that offered a panoramic view of the ranges which surround the Amphitheatre.

On the fifth day they donned their 70-pound packs and began the ascent of the west fork of the Ruth Glacier. The very smooth terrain and use of "climbing skins" (a synthetic material that allows skis to slide forward easily but backward with difficulty) made the climb almost pleasant. After nine miles they camped and rested up for the tougher day ahead, which included skiing to the base of the 1200 -foot pass that separates the Ruth and Kahiltna Glacier systems. That next afternoon they removed their skis and began the 2000 -foot climb up the icy slopes. Because it was primarily a ski trip, they had brought only a few ice-
climbing tools. So the ascent of these 30 -to 60-degree slopes proved more difficult than expected; they reached the top of the pass at midnight. Marcus recalls how the group relied heavily on Kim's expertise in those difficult hours.

The grueling climb left three members of the group with varying degrees of frostbite, so they decided to spend the next day on the top of the pass recuperating. The second night there brought what Marcus, a man not given to exaggeration, calls a "raging storm" with winds gusting up to 60 mph and temperatures of $-20^{\circ} \mathrm{F}$. The eighth day they broke camp with just enough visibility to negotiate the 50 -foot rappel required to descend to the Kahiltna Glacier. That day they descended 7000 feet, arriving at "Kahiltna International," the name given the snow-based landing strip for climbers attempting Mt. McKinley. From there they contacted the pilot by CB radio, and as the sun finally set they returned to Talkeetna. The following day they retraced their steps to Anchorage and then home.

Marcus says his frostbite was not severe, going away completely in several months, but Bill and Bob suffered more permanently. He found the trip most rewarding and exhilarating. He plans to return to Alaska next year, but maybe this time to explore the Copper River or one of the other famous runs.

Marcus began his skiing seriously in 1972 and has skied extensively throughout California. He has also written a ski touring guide for the Sierra Nevada.

## Sympathy

To Sandy Mondot (8264) on the death of her father in Sacramento, Nov. 28.

## Pseudoscience Deserves Exposure

"I HAD A UFO BABY" screams the tabloid headline while you wait on the supermarket checkout line. Your curiosity piqued, you begin to flip through the garishly illustrated pages. But soon it's your turn to unload the groceries from your cart and you return the tabloid to the rack, never learning just how this crossplanetary fertilization took place.

According to Kendrick Frazier, such stories fall under the heading of paranormal science. In a recent colloquium, he discussed UFOs, psychic predictions, astrology, cattle mutilations, and other such pseudoscience that regularly spews from both disreputable and reputable media.

A former editor of Science News, Frazier since 1977 has been the editor of Skeptical Inquirer, the journal of the Committeee for the Scientific Investigation of Claims of the Paranormal. Philosopher Paul Kurtz founded the group in 1976 to encourage critical investigation of paranor mal science claims. Among the Committee's consultants are such notables as Isaac Asimov, B.F. Skinner, Carl Sagan, "The Amazing" Randi, and many others from almost every field and from around the world.
"One impetus for the group's foundation
was the widespread interest in astrology at the time," says Frazier. "It was also the heyday of Yuri Geller, the self-proclaimed psychic who claimed to be able to bend spoons, keys, and other metallic objects solely by means of his mental powers UFOs were being linked with extraterrestrial craft - it was the time when Von Daniken's books on extraterrestrial visitors in ancient Egypt and Peru were best sellers."

One of the incidents analyzed in Skeptical Inquirer is the alleged crash of a UFO northwest of Roswell, N.M., in 1947. Charles Berlitz's book, The Roswell Incident, includes a photograph of an "alien" being escorted by MPs from the wreckage of his spacecraft. Subsequent investigation established that the picture came originally from the April Fool's issue of a West German magazine; the "alien" was actually a small boy in costume. Yet it was picked up by UFO enthusiasts and reproduced many times as an authentic picture of an extraterrestrial visitor.

The same book reports a UFO sighting on July 1, 1947, over Roswell, which had been convincingly explained as a weather balloon with an attached triangular-shaped radar reflector made of tin foil and wood.

Many such balloons were being launched from White Sands at the time. In fact, a local rancher had discovered just such a gadget on his property. Yet none of this is mentioned in the book.

The assertions made in The Roswell Incident are typical of pseudoscience claims; since scientists have generally ignored such claims, the field has been left open to exploiters and uncritical believers contributing to the spread of misinformation, according to Frazier.
"Scientists are responsible for helping the public distinguish between scientific and pseudoscientific approaches to popular mysteries and exotic claims," he says. "Our group is not an investigative body per se but it plays, we feel, an important public education role that is just as important as an inquiry role."

Frazier, an Albuquerque resident, is the author of The Violent Face of Nature (1979) and Our Turbulent Sun (1982); he has contracted with W.W. Norton to write a book on the ancient Indian culture of Chaco Canyon. A subscription to Skeptical Inquirer is $\$ 16$ a year for four issues and can be ordered from Box 229, Central Park Station, Buffalo, N.Y. 14215.


Joseph (9314) and Helen (9364) Phillips


Gabriel Chavez (3423)


Paul House (3155)


Norm Berg (7426)


Mark Gens (1523)


Mike Silva (3612)


Wally Green (9351)


Dennis Murphy (7422)


Victor Sirwinski (7426)


Bill Shoemaker (9325)


Bob Holt (7123)


Roger Williams (3154)


Sesario Cordova (3613)


Carolyn Eckart (9259)

## Fun \& Games

Football - Anyone interested in becoming a referee for the Young America Football League during the 1983 season should contact the League office, 883-9303, or Steve Hallett (1821), 4-6450. No previous experience or training is necessary.

Bowling - The Coronado Club Junior Bowling League - ages 8 to 18 - has openings for new members during the second half of the season. After the holidays, call Cis Kelly (3552), 255-8011, for more info.

If you're ready to emulate Marcus Libkind (see the Livermore page), then sign up for a cross-country ski clinic now. Classes are filling fast, so to make sure you get the class you want, call Recreation Manager Tom Lenz on 4-8486 right away. Beginner, intermediate, and advanced classes are offered. Cost is $\$ 12$ for instruction and $\$ 5$ for equipment rental. Clinics consist of an evening indoor session ( $11 / 2$ hours) and a full day of on-the-snow instruction.

Jan. 16 Intermediates Sandias (indoor date to be determined)
Jan. 23 Beginners Sandias (indoors on Jan. 18)
Jan. 30 Intermediates Sandias (indoors on Jan. 25)
Feb. 6 Beginners Sandias (indoors on Jan. 25)
Feb. 12 Intermediates Sandias (indoors on Feb. 8)
Feb. 19 Advanced Chama (telemark clinic, no indoor, \$10)

Sandia Bowling Association held its second tournament of the year on Dec. 4 and 5. This time Sandia bowlers swept all categories of the no-tap event. Tony (3417) and Emma Garcia took first place with a score of 1550. Carol Stomp (wife of Milt, 9722) had both high game and high series for women with scores of 264 and 749. Ernie Montoya (7471) had both high game and high series for men with scores of 298 and 788. The next SBA tournament will be a Scotch Doubles event on Jan. 22 and 23.

Sandians who competed in the Fiesta Bowl Marathon in Phoenix on Dec. 4 included Henry Dodd (9752), Kathy Hiebert (7241), Juan Griego (3713), Max Sandoval (0314), Jim Harrison (9311), Jerry Quinlan (2636), Bill Hendrick (3643), Pat Allen (3416), and Larry Johnson (9323). It was Pat's first marathon, and she managed to break the four-hour mark. So did 62 -yearold Larry. Henry, Bill, and Jim broke three hours, and Jim's wife Judy, along with Kathy, qualified for the Boston Marathon next year.

LAB NEWS office has copies of a release put out by KAFB Youth Activities people that describes many of the activities open to the offspring of Sandians - swimming, soccer, and basketball teams, and Youth Center goings-on. Volunteer coaches are needed too; call 4-9975 if you're interested in that. Or pick up the release in MO125.

One of the better non-lethal ways to slow intruders into high-security areas (such as nuclear material storage facilities) is to generate an aqueous foam, a shampoo-suds-like substance that obscures their vision and disorients them. While adaptations of the foams developed for fighting fires and lubricating aircraft runways for emergency landings have been used to deter intruders, a problem has been that the foams subside too rapidly for anything but immediate protection; that is, foams are not stable for more than brief periods.

Pete Rand, of Physical Properties of Polymers Division 1813, has developed a comparatively stable high-expansion aqueous foam. It can be stored for long periods as a liquid concentrate or solution then mixed with water in a foam generator to produce the flow of foam.

Like traditional foams, the new foam has expansion ratios from 20 -to- 1 to 600 -to- 1 ; a gallon of concentrate can produce as much as 600 gallons of foam when mixed with water.
"The difference in the new foam is that only five percent, by weight, drains to the bottom of a container or room in an hour," says Pete. "Half remains as foam in six hours. Other foams drain in half an hour."

Key to the foam's exceptional stability is a recently discovered synergistic effect achieved when small amounts of a watersoluble polymer and a fatty alcohol stabilizer are mixed with the foaming solution's other active ingredients - surfactant (a foaming agent) and a solvent that concentrates and reduces the viscosity of the foam.
"Early experiments indicate that a type of ordering, possibly liquid crystal formation, occurs when certain types of surfactant mix with precisely measured amounts of polymer and stabilizer," says Pete.
"This ordering, which does not occur if polymer or stabilizer are used separately, apparently produces the foam's superior stability."

Tests show that when the foaming solution includes polymer but no stabilizer, liquid drainage exceeds 80 percent in 15 minutes. When stabilizer is used without polymer, liquid drainage is 30 percent in 15 minutes.


FOAM FLOWS from Pete Rand's generator in a test of the stability of aqueous foams for use as a deterrent in a high-security area.

The new foam consists of 97.8 percent water, 0.8 percent surfactant (sodium lauryl sulfate or alpha olefin sulfonate), 0.2 percent polyacrylic acid-type polymer (Carbopol 941, manufactured by B.F. Goodrich, for example), 0.2 percent stabilizer ( $n$ dodecyl alcohol), and one percent solvent (water-soluble alcohols such as n-butanol and n-propanol).

The early stages of this work were performed by Edgewood Arsenal in Maryland under Sandia sponsorship. Later work at Sandia, which led to an understanding of the stabilizing mechanism of the Edgewood foams, allowed these stable foams to be developed.

A concentrated form of Sandia's foam is made by dissolving the stabilizer in the solvent, dispersing the polymer in this solution, and then slowly adding this blend to a water-surfactant mixture. Before use, the concentrate is diluted with water at a nine-to-one ratio.

The U.S. Department of Energy has filed a patent application on the new foam.


PRESIDENT DACEY accepted an award on behalf of the Labs from Ann Marie Griego (3511), chairman of Sandia's Black Outreach Committee. The award was presented for Sandia's outstanding support and promotion of the Albuquerque Branch N.A.A.C.P Youth Council

MILEPOSTS LAB NEWS

## DECEMBER 1982



Irv Lenz-7556

Gene Blake-9210 35

Gary Montague - 3442


Mike Spencer-2341 15

35



Mary England - 341320


Dick Willey - 1128


30


Gayle Cain-8412
30


Jim Simons-2342 15


Joe Ochoa-3423 30


Fred Shoemaker-7132 30


Sandra Moore-8130 10


Charles Lowe-2553 25


Bob Chavez-3615
20



# Two Sandia Projects Continue To Provide Help for the Needy 

The oldest Christmas Project at Sandia is "Shoes for Kids." For almost 25 years employees in the Weapons Analysis Directorate 7200 have contributed money in order to provide shoes for needy children in the city. Good quality shoes have been purchased from one of the Kinney Shoe Stores, usually at a generous discount. Last year over 90 pairs were purchased.
"We hope to buy even more shoes this year," says Bob Keeling (7240), chairman of the campaign. "Albuquerque Public School officials and counselors select the grade school age children, based on the greatest need, and bring them to the store for fittings. The Kinney Shoe Store in Coronado Center is supporting our project this year."

You might call it the South Highway 14

Gift Shop. Operating out of the LAB NEWS office and stocked with Sandia caps and Tshirts, used and new books, and the latest offering - a Sandia belt buckle - the South Highway 14 Village Project continues a tradition begun 17 years ago. Money from the sale of these items, plus cash donations, provides the Project with funds to help families in the villages on the east side of the Manzano Mountains.

The Project has a file of about 70 needy families. Funds permit about half that number to be helped each year. Gift boxes are filled with food, household items, and clothing. A caravan of five pickups will leave Sandia early tomorrow morning with boxes for families in Chilili, Escabosa, Tajique, Torreon, Punta, and Manzano.

The South 14 Project is run by several volunteers in Org. 3000.


FOR CHRISTMAS, consider this Sandia belt buckle, just arrived and offered by LAB NEWS in behalf of the S. Hwy. 14 Village Project. Cost is $\$ 8$. Buckle fits one-and-three-quarter and twoinch belts.

## JUNK•GOODIES•TRASH•ANTIQUESOKLUNKERS•CREAM PUFFS॰HOUSES•HOVELS•LOST•FOUND०WANTED•\& THINGS

CLASSIFIED ADVERTISING
Deadline: Friday noon prior to week of publication unless changed by holi
day. Mail to: Div. 3162 (M0125) day. Mail to: Div. 3162 (M0125).

## rules

Limit 20 words.
One ad per issue per category.
3. Submit in writing. No phone-in
5. For active and retired Sandians and DOE employees.
No commercial ads, please.
No more than two insertions of same ad.
8. Include name \& organization. Housing listed here for rent or sale is available for occupancy without
regard to race, creed, color, or regard to race, creed, color, or
national origin.
-

## MISCELLANEOUS

HONDA shop manuals: '78 Accord \& 75 CVCC, $\$ 14$ ea.; porcelain sink in $8^{\prime}$ cabinet top, $\$ 20$. Zirzow, 294-6142.
GIRL'S $16^{\prime \prime}$ sidewalk bike w/training wheel; girl's 20" Huffy hi-rise bike; fencing, $2^{\prime \prime} \times 4$ " ga. wire mes 48 "27 . Wente, 299-5274
DRUM SET, pearl finish bass, tom-tom snare \& acces., no cymbals, \$250 MeTRIC STOVE
CTRIC STOVE, harvest gold, GE used one year, $\$ 125$; Cohn corne
$\$ 75$. Miller, 298-3743 after 7 \$75. Miler, 298-3743 after
ENCYCLOPEDIA BRITTANICA, 15th edition, printed in 1977; 30 vols. red vinyl binding, \$475. Hulme $299-7715$
PRINTER CENTRONICS 701, 60 cps , bidirectional logic seek, $16^{\prime \prime}$ wide carriage, tractor feed, \$300 or make offer. Chu, 298-1073.
STUDIO twin bed, black \& yellow plaid, no back or cushions, \$35. Bassett 898-1840.
MOTOCROSS bike, LaCross frame racing type, all accessories, one bike parting out in pieces, make of fer; 10-spd. Schwinn, \$75. Arana 299-1214.
NOOK DINETTE SET, table \& corner upholstered - benches, tan color $\$ 60$; tan recliner chair, $\$ 20$ Cosden, 881-1412.
MARKLIN train set, all metal, 6 cars, 80 pieces of track. James, 294-6837 HO train set \& folding train table, $\$ 60$ circular saw, \$30. Schaedla, 898-9210.
AQUARIUM, 20 gal., pump, under gravel filter, hood, light, gravel plants, other accessories, \$45, small hood \& light, \$10. Shepherd, 296-0875.
2 BAR STOOLS, Cosco. Kindschi, 256-0531.

WARDS weight bench w/leg lift, adjustable incline, arm pully, \$70; 150 lbs. loose weights, $\$ 40$, both $\$ 100$. Bonaparte, 296-4916.
METAL DESK, brown, 32 " $\times 45^{\prime \prime}$, $\$ 95$; Coors Beer Tap, complete w/gauges, tank, \$75; bumper pool table, $34^{\prime \prime} \times 50$ ", $\$ 95$. Lassiter, 299-1492.
ORGAN, Baldwin, 2 keyboard, $\$ 350$; Perty Perk, 35 -cup, $\$ 15$; car radio (from ' 82 Champ), AM push button, \$25. Sniezek, 888-3710.
HOOVER convertible upright vacuum cleaner, $\$ 15$; baseboard electric heater, 6 ' long, new, $\$ 25$. Simons, 821.9343.

DOG BED, rattan, $38^{\prime \prime} \times 26^{\prime \prime}$, used briefly, \$20. Krefft, 881-3486.
UTILITY TRAILER, steel flatbed $5^{\prime} \times 8^{\prime}$ w/removable side posts, has Ig. $750 \times 16^{\prime \prime}$ wheels, $\$ 250$. Worrell, 299-0381.
CHAINS for 155SR13 tires, new, \$24 $X-C$ skis, 210 cm , new, \$25; Dan Wesson .22LR vent $8^{\prime \prime} \mathrm{bbl}$ revolver, \$200. Chu, 293-1222.
12-STRING acoustical guitar; truck tires, 16.5 highway and snow. Martin, 299-3004
TWO $6: 50 \times 16 \mathrm{LT}$ tires, tubes, rims $\$ 20$ ea. cash. Buza, 298-1531.
PING PONG table, Sears best, $\$ 50$. Padrick, 294-0303.
COMPUTER CHESS, sensor challenger, 8 levels of play, other eatures, still in carton w/instru tions, $\$ 85$. Johnson, 898-1098 tone print, $\$ 400$ for pair. Delnick, lone print,
$294-4670$
LUMINARIA SALE: Scout Troop 165, pick up at St. Pauls Church, 9500 Constitution, Dec. 18, 19, \& 24 or order, $\$ 3 /$ doz., $50 ¢$ mile delivered Widner, 294-2014
SKI RACK for Opel GT, \$25. Brandon 881-6698
TELEPHOTO LENS, Vivitar, 200 mm , 3.5, Minolta mount, used infre quently, \$50. Trump, 299-5162.
GARRARD turntable w/dust cover, fully auto., $33,45,78$ RPM, $\$ 20$. Hen drick, 296-2163.
WOMAN'S figure skates, size 5 Guidotti, 298-8818
SPITZ puppies, purebred, 6 wks . old Dec. 12, will hold until Christmas w/deposit, male, $\$ 65$; females \$55. Jacobson, 265-0995.
NIKKORMAT, Micro-Nikor-P, FTN, 55 \& 135 mm lenses, extension tube, M2 adapter ring, filters, accessory shoes, leather cases, $\$ 750$. Shane, 294-4920.
SKI BOOTS, Lange, size $8 \mathrm{M}, \$ 60$ Eichelberger, 266-7042.
METAL DETECTOR, White's Coin master model 5000D w/8" coil \& rechargeable battery pack, $\$ 160$. West, 255-5855.
TIRE CHAINS, Sears \#7697, bar reinforced, never used, chain adjusters Sears, value $\$ 50$, price $\$ 35$. Cum mings, 292-0524.

AIR COMPRESSOR, 2 stage, 6 HP gasoline engine, $\$ 800$. Adams 266-9568.
HI-FI, Scott 344B stereo AMP/tuner \& Garrard 72 B changer, working, both for $\$ 60$ or best offer. Anastasio 821-4245 after 5 .
SEARS belt-disc sander, $\$ 50$; twin lens Rolleiflex, $\$ 150$; Nikon 28 mm wide angle lens, \$85. Laskar, 299-1024 QUEEN SIZE BED, complete, $\$ 150$ coffee table, $\$ 40$; oscilloscope $\$ 40$; heavy duty $1 / 2^{\prime \prime}$ drill motor, \$40; Phone-Mate, \$70. Falacy 293-2517.
SOLID maple table by Sprague-Carlton $54^{\prime \prime}$ round drop-leaf extends to $54 " X 90 " \mathrm{w} / 4$ leaves, $\$ 300$ Erickson, 299-6824
VIDEO game w/12 cartridges, $\$ 75$ skis, $170 \mathrm{~cm} \mathrm{w} / 0$ bindings, $\$ 15$ Campbell, 298-9265.
21" ADMIRAL B/W TV, need pix tube \$25; 5 ea. 165-75-13 ww radial tires. Scranton, 869-6589.

## DEADLINE

for the Jan. 7 issue is noon, Dec. 23

DAHLQUIST DQ-10A speakers w/KEF T-27 tweeter mods \& mirror, imaged, $\$ 600$; Yashica GS Electro 35 mm camera, \$60. Booth 296-3955
BLACK \& DECKER home utility drill stand \& $1 / 4^{\prime \prime}$ drill, \$15. Rainhart 821-3690.
GEMEINHARDT FLUTE, student model silver plated w/case, \$200 Renschler, 294-2600
HIDE-A-BED couch, blue upholstery, $\$ 100$; single beds, Hollywood style w/brass-like heads, \$35 each. Myre, 884-5235 weekends.
FREE PUPPIES, one male, one female sheltie-jumper cross, ready for Christmas. Wymer, 294-0605.
SKI BOOTS, men's DynaFit size 12 \$35. Wright, 296-3850.
AKC reg. Cocker-Spaniel puppies, 3 wks. old, black \& white, 3 male, female, \$125. Martinez, 293-7626 COLOR TV, $13^{\prime \prime}, \$ 150$; stereo, $\$ 100$ vacuum cleaner, $\$ 25$; electric heater, $\$ 20$; circular saw, $\$ 22$; drill, \$13; 50' ext. cord, \$10; lamps, \$7. Breitung, 255-2566.
ARMSTRONG FLUTE, sterling silver head joint \& body, open hole, $\$ 450$ Higgins, 898-0409 or 884-1880. WHIRLPOOL range w/dbl oven \& filter an, avocado. Burchett, 299-1689 GOLD velvet Lazy Boy recliner, \$195 greenish gold velvet chair, \$145 Ripi, 293-2553 after 5.
TIRE CHAINS fit $9.50 \times 16.5,7.50 \times 16$, other truck tires; chains to fit some $14^{\prime \prime}$ sizes, truck, $\$ 35$, car $\$ 15$ Cook, 869-6921

## TRANSPORTATION

BICYCLES: Schwinn Paramount track frame, BB, headset, crank \& rear wheel, \$350; Schwinn Paramoun road frame, headset, $\$ 250$. Downs 268-7392.
' 66 CHEV. Bel-Air 4-dr. sedan, 287 V8, AT, PS, AM radio, $\$ 500$ or best of fer. Rueb, 299-1707.
' 76 HONDA Accord, 3-dr. hatchback, 71 K miles, 5 -spd., $\$ 3000$. San doval, 293-6261.
' 77 YZ-400 YAMAHA, desert \& orig tank, \$595. Healer, 298-6967.
' 78 OLDS Regency, 4 -dr., AM-FM-CB all power options, tilt wheel, cruise, new radials, \$5350. Philbin 292-1352.
' 82 PONTIAC Firebird, V-6, auto., PS, PB, AC, AM-FM cass., gold, \$9200. Coffin, 266-4610.
'78 PLYMOUTH Arrow. Randolph 256-7837.
'80 PLYMOUTH Champ, 1.6L engine, 4-spd., w/OD, AM, AC, new radials, complete tune-up \$3400 McDowell, 292-1099.
' 76 TRANS AM, $400 \mathrm{~V} 8, \mathrm{AT}, \mathrm{PS}, \mathrm{PB}$ tilt. Gorman, 255-4431
' 75 PINTO Squire wagon, new factory block, new head, engine cost over gloarantee $\$ 2200$ miles guarante
BICYCLE, 20" girls, Wards Hawthorne \$20. Rohwein, 298-8391
78 PINTO hatchback, std. 4-spd. 77 FORD 1 RD. PB PS, 869-6693. 7 FO LTD, PB, PS, AC, \$1995 79 Ford pickup, PS, PB, short bed \$3750. LaBrier, 298-2835
' 79 MERCURY Zephyr Z7 sports coupe, $2-$ dr., bucket seats, moon roof, AC, AM-FM-8TK, 4 -spd. $\$ 3000$ or best offer. Hymes, $821-3255$.
71 AMC Sportabout wagon, 6-cyl. 3 -spd., $\$ 900$; Jeep hauling trailer w/folding ramps, \$900. Falacy, 293-2517.
' 82 HONDA Ascot, red, 500cc 4 -stroke single w/elec. start, 2000 miles, \$1700; Ramsey, 294-2054 75 OLDS Cutlass, full size stn. wgn w/all power options, sky roof, orig. owner, 92 K miles, all new radials \& battery, $\$ 1500$. Ballard, 344-8751
' 56 T-BIRD, continental wheel kit, AT peacock blue. Sandoval, 293-6261.
HONDA ATC-70 all terrain cycle, new - won as door prize - make offer. Fisher, 298-0526.
78 YAMAHA YZ-80 motorcycle \$400. Wright, 296-3850.
73 FORD stn. wgn., $\$ 350$ or best offer. Robles, 298-2456
' 81 YAMAHA 650 Special, 12,800 miles, incl. helmet \& goggles, $\$ 1200$ (half of new price). Breitung, 255-2566
CENTURION Lemans 10 -spd. bicycle, pump, Blackburn rack, many improvements, \$225. Siemers, 296-0651.
' 77 FORD Granada, 8 -cyl., 42 K miles AT, R\&H, radials, $\$ 2100$. Colborne,
$266-3046$. 266-3046.
' 75 HONDA XR-75 dirt bike, 4-cycle (ages 8-13). McKenzie, 298-8933 HARLEY-DAVIDSON 1980 FXE-F Super-Glide, 4100 miles, lots of extras. Roberts, 268-5041 or 265-6300.
BICYCLE, Roger DeCoster BMX, has chrome frame, \$85. Marchi. 299-3653.

## REAL ESTATE

TRIPLEX located near San Mateo \& Gib son, $\$ 67 \mathrm{~K}$ financed at $11.5 \%$. Har ris, 821-3001 or 294-2651 after 5 . MOBILE HOME $14 \times 65$ Schult Homestead (1977), 2-bdr., 1 bath Ig. open LR, DR, \& kitchen, unfur nished, \$15,000, approx. loa alue \$13K. Runkle, 877-2008
4-BDR., 2 bath, Ig. FR w/bar in Rio Ran cho, 1800 sq. ft . house on $1 / 2$ acres w/fenced back yard, end of cul-desac, $\$ 68 \mathrm{~K}$ assumable loan, financ ing available. Brandon, 881-6698.

## WANTED

$8 \times 7$ STANDARD one-car garage door Roberts, 268-5041 or 265-6300. ELECTRIC guitar and amplifier. Hymer 293-6029 after 5
QUEEN SIZE bed frame \& box springs Vollendore, 293-7161
SKI outfit for $3-\mathrm{yr}$.-old, including boots around size 8. Westman 881-0471.
'71-'81 JEEP Wagoneer or Cherokee fully equipped, excellent condition cash or take over payments Schuch, 299-8721
SMALL upholstered chair needing recovering, student project. O'Neill 892-6754
FIESTA DRESS or skirt, size 14 or 16 Grimes, 299-2548.
TIRE CHAINS for $8.75 \times 16.5$ wheels

## Coronado Club Presents

## Get New Year's Tickets Now

FRIDAY HAPPY HOURS continue this month in the Club's main lounge and lobby area with special prices. Mid-week Happy Hours are on Tuesdays and Wednesdays with the best prices in town. On Thursday, Dec. 23, start the holiday with Happy Hour at the Club and a spread of green chile and posole.

TICKETS for the Club's traditional upstairs and downstairs New Year's Eve blast are moving rapidly. Pick up yours by the end of the day Dec. 23. Frankie and the Corvettes hold the upstairs main ballroom while Bob Banks and the Trio raise the roof downstairs. It's a package deal - champagne, open bar all evening, noise makers, funny hats, confetti. and a super breakfast to top it off. Tickets are $\$ 37$ for member couples: $\$ 40$, guest couples.

IN EARLY JANUARY. the Club returns to normal operations with a Happy Hour/buffet on Friday. Jan. 7. It's an oldfashioned barbeque with ribs and chicken for $\$ 5.50$ adults, $\$ 3$ children under 12 . Borderline, a country and western specialty group, plays for dancing.

THE JANUARY CALENDAR also includes a couple of events worth marking now on your personal calendar. On Saturday, Jan. 15, by special arrangement with La Compañía de Teatro de Alburquerque, the Club will present Family Theatre Night with dinner and a performance of "Cuentos Nuevo Mexicanos" - a dramatization of New Mexican tales, folklore, and music in both Spanish and English. The buffet that night features the Club's famous steamship round of beef or fried chicken. Tickets for the evening are $\$ 5$ for adults, $\$ 3$ for children. Following the theatrical perform-


HAPPY NEW YEAR Charlie Salazar (7482) and Angie Lucero invite you to the Club's New Year's Eve Party. It's a package deal champagne, open bar all evening, funny hats, noise makers, and a super breakfast - for \$37 member couples, $\$ 40$ guest couples. Pick up tickets at the Club office now.
ance, pianist Alex Montoya plays in the main lounge alongside a portable dance floor.

Then, on Friday, Jan. 28, Al Hurricane will create a storm for a special Happy Hour featuring a la carte menu service.

This is followed by "Single Mingle '83." All singles on Base are invited to a party on Saturday, Jan. 29. This will be "singles only" - no admission charge - with a great band called Flashback providing music and entertainment. Invitations will be issued, but you might not be on our list. You're invited anyway! Mark it on your calendar now.


CORONADO SKI CLUB'S annual "Snowball" Christmas party is set Dec. 21 with the Watermelon Jug Band booked for the occasion. To join the fun, call Pat Cox (3734), $6-0160$, for details.

In January, the group meets on the 18th at 7 p.m. for a program on "Cures for Common Skiing Problems (Equipment Oriented)" by the Mountain Sports, Ltd., people. There will be movies and door prizes.

REDONDO ROUND DANCERS start a new class for beginners (taught by Fred and Kay Haury) on Thursday, Jan. 6, at 7 p.m. After class, the group dances until 10:00; New members are welcome. Call Charlie Clendenin (2611), 299-2071, for details.

CORONADO GRANDSQUARES resume regular Monday square dance sessions on Jan. 3. A new series of advanced lessons, called plus dancing, begins Jan. 10. For details, call Ed Ehrman (2154), 4-2816, or Bob Butler (7233), 4-4940.

TRAVEL DIRECTOR Shirley McKenzie (2432) announces a new low-fare package to Hawaii April 16-24. Cost for the week at the Outrigger is $\$ 652$ per person. The Outrigger is right on Oahu beach. Stay a half-block away at the Beachcomber for $\$ 580$. The package includes airfare, lodging, transfers, taxes, and bellperson tips. See Shirley in the lobby tonight between 5 and 6 for more details.

The Disneyland/San Diego package is scheduled March 28-April 2 or April 4-8 for \$328 per person.

## Speaker

R.L. Iman (7223), "Considerations with Regard to Input Variables for Computer Simulation," invited paper, Winter Simulation Conference 82, San Diego, Dec. 6.


[^0]:    A WORLD CAR
    The automobile industry is deep into a worldwide The automobile industry is deep into a worldwide
    revolution that may in the end produce "a true revolution that may in the end produce "a true 'worid car, Combining the best of Japanese, ewsmagazine Asiaweek of Hong Kong.
    "Familiar corporate and national identities are being submerged in a wave of equity deals, joint ventures, 'criss-cross' distribution, and components agreements. More than half of the world's thirty-odd independent manufacturers are likely to the world's thirty-odd independent manufacturers are likely to
    disappear into mergers or bankruptcies when this new industrial revolution is complete. The shakeout, expected to contrial revolution is complete. The shakeout, expected to con-
    tinue into the 1990 s, will leave the industry meaner and tinue into
    leaner."
    Among the possible moves that Asiaweek foresees are some combination between Chrysler and Japan's Mitsubishi Motors; production arrangements between Japan's Nissan and Volkswagen and Alfa Romeo; and joint production between General Motors and Toyota. "The Nissan-Alfa Romeo project excites industry specialists because it marries Alfa Romeo's acclaimed engine technology with the Japanese maker's design skills."

